

ENTHUSIASTS' CAMERAS

INTRODUCTION

If you want to get serious with your digital photography, forget about fancy gimmicks and go for a camera that puts you in the driving seat. This month we round up the best digital SLR cameras that sensible money can buy, plus the ultra-zoom models that are snapping at the SLRs' heels. With knockout cameras ranging from £161 to £660, we have something for photography enthusiasts of all persuasions.

Ben Pitt

Music and photography expert

ben@computershopper.co.uk



Creative photographers need a little more control over their cameras. We test 12 versatile digital SLR and ultra-zoom models that will help you realise your artistic vision

MAXIMUM EXPOSURE

Choosing an... Enthusiasts' camera

The cameras in this month's labs test fall into two categories: digital SLR and ultra-zoom. Digital SLR cameras are named after their single-lens reflex design, which uses the lens both for capturing photos and for the optical viewfinder. The image you see through the viewfinder is exactly what the sensor will capture, complete with any zoom and focus adjustments, and it's much more detailed than an LCD screen preview. A digital SLR's sensor is much larger in size than those used in compact cameras, too. This means the camera is larger overall (and so less portable, but more comfortable to hold), and it also boosts image quality significantly.

ZOOM, ZOOM, ZOOM

Ultra-zoom cameras can't compete with the through-the-lens (TTL) optical viewfinders on SLRs, but the best ones come close for image quality in favourable conditions. Their key selling point is a zoom range that goes way beyond those of compact cameras and entry-level digital SLRs. Big zooms aren't useful only for birdwatchers and paparazzi, though – pretty much every type of photographic opportunity can benefit from the ability to zoom into a particular detail for a more interesting composition.

Telephoto zoom settings increase the likelihood of taking blurred photos due to camera shake, so we're pleased to see that optical image stabilisation is built into all the ultra-zoom cameras on test. Two of the SLRs offer it too, which is a major bonus if you decide to attach a telephoto lens, but it also comes in handy for shooting in low light. Two of the ultra-zoom cameras and all the SLRs also provide an extended wide-angle zoom compared with those on most compact cameras, which is great for exaggerating perspective or capturing sweeping vistas.

A zoom lens's magnification is measured by its focal length range, which is quoted as values equivalent to those of a 35mm film camera for easy comparison. The average 3x compact camera has a 35-105mm lens, so anything below or above these values will give an extended wide-angle and telephoto view respectively.

Choosing between an SLR and an ultra-zoom model may simply come down to budgetary constraints, but there are good reasons for choosing an ultra-zoom model other than price. Their stabilised telephoto lenses make them better for wildlife or sports photography. You can buy stabilised telephoto lenses for SLR cameras, but these cost from around £400 on top of the price of the camera. Meanwhile, most ultra-zoom



This month

DIGITAL SLRs

NIKON D40 Zoom Kit
Page 112



NIKON D40x Zoom Kit
Page 112



CANON EOS 400D
18-55mm Kit
Page 112



PENTAX K10D + 18-55mm
Page 112



OLYMPUS E-510 +
ED 14-42mm
Page 113



NIKON D80 18-70 Kit
Page 113



ULTRA-ZOOM CAMERAS

SONY Cyber-shot DSC-H3
Page 113



CANON PowerShot SX100 IS
Page 113



CANON PowerShot S5 IS
Page 114



SONY Cyber-shot DSC-H9
Page 114



PANASONIC
Lumix DMC-FZ18
Page 114



PANASONIC
Lumix DMC-FZ50
Page 114



cameras are much more compact than SLRs, and are able to shoot video clips, which the single-lens reflex mechanism prohibits. However, we won't pretend that it's a level playing field: overall, SLRs are superior cameras and are well worth spending more money on.

RAW PHOTOGRAPHY

The trait that draws these two types of camera together is their target audience. Both appeal to photography enthusiasts who want something more than a point-and-shoot camera that merely records a scene with sterile objectivity. All the cameras on test offer manual exposure controls, and all but one include manual focus and white balance, priority exposure modes and numerous other parameters for customising image quality. Beginner-friendly features such as scene presets or face detection are often included, but these are secondary to the ability to adjust the sharpness and saturation of photos, or to fine-tune the white balance. Automatic bracketing for exposure, white balance and focus enables you to take groups of three or five shots in quick succession at a variety of settings, so you can choose the best one after the event.

For photographers that don't want to take chances, a RAW mode records the unprocessed data from the camera's sensor. This can then be processed on a PC with the supplied software or third-party applications such as Adobe Camera

Raw (included with Photoshop CS and Elements) or Lightroom. Doing so avoids any loss in quality due to JPEG compression, and postpones white balance, noise reduction and even some exposure decisions until you have time to consider them carefully, comparing different settings to find the best possible results.

Comprehensive manual control is important, but so is having an effective means of harnessing it. Most compact cameras require you to wade through menus to access their settings, but enthusiasts' cameras should keep key settings close to hand. On digital SLRs – and Panasonic's FZ50 – focus and zoom are adjusted using lens rings, while dials are provided for other settings. These are far quicker than buttons, both for large adjustments and precise fine-tuning, and you can often use them without taking your eye away from the viewfinder. The other cameras have less immediate controls, but some models make clever use of simpler controls for efficient manual adjustment.

Demanding photographers should expect their cameras to keep up with them. For the first time in *Shopper's* history, performance hasn't been a big concern. The slowest cameras on test are pretty fast, capturing a full-resolution shot every 1.6 seconds. Battery life is also vital, but no camera fared badly in this respect.

Top of the list of priorities for any keen photographer is image quality. None of the

cameras reviewed this month embarrasses itself, and most produce photos that range from excellent to stunning. In the past we have described each camera's ability to capture pleasing, accurate colours, but this month all 12 models passed this test. Detail was consistently high, too, and the worst offenders here are only a few per cent behind the leaders.

As usual, noise levels are more variable, along with the detrimental side effects of noise-reduction processing. There's a gulf between the SLR and non-SLR cameras, which is a result of the difference in their sensor dimensions.

CLOSED RANGE

While there are dozens of camera manufacturers in the budget market, fewer companies venture into the more challenging ultra-zoom and SLR markets. That's why the 12 models on test come from just seven manufacturers, but it also explains why there are no turkeys in the line-up. No camera is rated lower than three stars, and four of them have scooped awards.

Rest assured, though, that we haven't lowered our standards. On the contrary: the worst fault of one of the lowest-ranking cameras is that it's a good all-rounder but with no exceptional features. The four awards reflect the quality of the cameras available to enthusiasts, so no matter what your budget or priorities are, there's bound to be something to win you over.

NIKON D40 Zoom Kit

★★★★★

£297 inc VAT

From www.amazon.co.uk

The D40 has the lowest resolution of all the cameras here, but it's also the most affordable digital SLR currently available. It's relatively small and light, but not quite as comfortable in large hands as the bulkier models.

The resolution may be a turn off, but six megapixels is plenty for anything except A3 prints and heavy cropping, and besides, the D40 didn't embarrass itself for detail compared with the 10-megapixel SLRs. The lower resolution has a positive side, too. Because the sensor has the same 1.12in size as the 10-megapixel Nikon SLRs, more light hits each pixel, making it easier to measure accurately. The result is extremely low noise; the D40's photos at ISO 1600 look as clean and detailed as those from the best ultra-zoom cameras at ISO 200. Even at its highest sensitivity, which is labelled Hi 1 and equivalent to ISO 3200, it produced perfectly usable results on a par with those from the excellent Nikon D80.

The D40 is clearly designed for first-time SLR buyers, with onscreen graphics that play an educational role – flicking through the ISO speeds or drive modes presents a series of images showing where each setting might be used. It's a nice idea, but once newcomers have learnt the ropes they will wish for dedicated buttons.

There are a couple of other niggles shared with the D40x, but with no major flaws and a low price, the D40 is an excellent choice for those who can't afford Canon's EOS 400D.



SUMMARY

- ✓ Great image quality for price
- ✓ Excellent value
- ✗ Few dedicated buttons

DIGITAL SLR CAMERA 6.0 megapixels (3,008x2,000 pixels), 3.0x optical zoom, SDHC slot, 7.4V, 1,000mAh Li-ion battery
PART CODE VBA150KU01
DETAILS www.nikon.co.uk

NIKON D40x Zoom Kit

★★★★★

£380 inc VAT

From www.rankhour.com

The D40x is essentially a D40 with a 10-megapixel sensor and a faster continuous mode, up from 2.5fps to 3fps (we measured 2.77fps with noise reduction enabled). We're surprised that Nikon hasn't also improved the D40's hands-on control too, especially as the up and down navigation buttons are functionless when the screen is off. The supplied RAW conversion software is underpowered, and Nikon clearly hopes customers will spend another £100 on its more capable Capture NX software.

The D40x lacks the Canon EOS 400D's automatic exposure and white balance bracketing, but it does have one operational advantage over the 400D: a configurable Auto ISO mode. This allows you to dictate in advance exactly how the ISO and shutter speeds react to varying light. It's a fantastic feature but, bizarrely, it's listed on a separate page in the menu from the other ISO options. As a result, the LCD screen still shows a manual ISO speed when it has been overridden by the configurable auto option. One other issue to note is that the D40 and D40x don't have internal focus drive motors, so auto-focus works only with AF-S and AF-I lenses, which have built-in motors.

Image quality was consistently high across our tests but noise levels were a tad higher than on Nikon's D80 and Canon's 400D, with noise reduction giving ISO 1600 photos a slightly spidery look. It also failed to match the D80 and 400D's wide dynamic range. Overall, it's unlikely to disappoint, but Canon's 400D is better.

SUMMARY

- ✓ Configurable automatic ISO
- ✓ Unlimited 3fps shooting
- ✗ Interface can be tricky to use

DIGITAL SLR CAMERA 10.0 megapixels (3,872x2,592 pixels), 3.0x optical zoom, SDHC slot, 7.4V, 1,000mAh Li-ion battery
PART CODE VBA170KU01
DETAILS www.nikon.co.uk

CANON EOS 400D 18-55mm Kit

★★★★★

£395 inc VAT

From www.rankhour.com

Canon's EOS 400D has been our favourite digital SLR since we first reviewed it in *Shopper* 228, and there is still nothing to beat it for all-round quality and value.

On paper there's little to distinguish it from the other digital SLRs at this price. The 10-megapixel sensor, 3x zoom kit lens and 2 1/2in LCD screen are typical, and 2.8fps continuous shooting for 32 shots in our test is respectable but nothing special. The nine-point auto-focus is a bonus, and there's a generous smattering of dedicated buttons for photographic controls, but just a single command dial for adjusting values. Photographic options are comprehensive, and you can use custom presets for sharpness, contrast, saturation and colour tone. However, we don't like the way Auto ISO is unavailable in program and priority modes, while flash suppress and continuous shooting aren't available in the fully automatic mode.

The 400D's trump card is its image quality, which is the joint-best with Nikon's D80. Both kept noise at bay while maintaining sharp detail at ISO 1600, and had a wider dynamic range than the other cameras. The D80 produced more pleasing automatic exposures but the 400D captured slightly sharper detail, making it hard to pick an outright winner for image quality. However, for £265 less the EOS 400D easily wins for value.



SUMMARY

- ✓ Fantastic image quality
- ✓ Excellent value
- ✗ No Auto ISO in most modes

DIGITAL SLR CAMERA 10.1 megapixels (3,888x2,592 pixels), 3.0x optical zoom, CompactFlash slot, 7.4V, 720mAh Li-ion battery
PART CODE 1237B009AA
DETAILS www.canon.co.uk

PENTAX K10D + 18-55mm

★★★★★

£455 inc VAT

From www.purelygadgets.co.uk

The bulky K10D has more in common with Nikon's D80 than the other sub-£500 digital SLRs. It bristles with buttons and a pair of command dials, and has a backlit passive LCD for settings. The ISO speed takes a couple of button pushes to reach, but a sensitivity-priority mode places this on one of the command dials for direct access.

Image stabilisation is built into the sensor, a feature that Canon and Nikon's digital SLRs have yet to offer. Continuous mode is the fastest here, with a high-capacity buffer enabling it to shoot 59 top-quality JPEGs at 3fps before our SD card slowed it down to 2fps. The 11-point auto-focus was a little slow in low light but produced very few out-of-focus shots.

Our image quality tests failed to reproduce the lack of crisp detail we saw when we first reviewed the K10D (*What's New, Shopper* 237). Understated noise reduction meant that ISO 1600 shots were a bit noisier than those from the Canon and Nikon cameras but tended to be sharper. However, JPEG compression artefacts were sometimes visible in complex textures, so it's worth shooting in RAW mode. Colours were rich on automatic settings but the dynamic range was disappointing, clipping highlights in high-contrast scenes. Ultimately, none of these image quality issues makes a serious impact on this extremely capable camera.

SUMMARY

- ✓ Excellent controls
- ✓ Image stabilisation built-in
- ✗ Disappointing dynamic range

DIGITAL SLR CAMERA 10.0 megapixels (3,872x2,592 pixels), 3.0x optical zoom, SDHC slot, 7.4V, 1,620mAh battery
PART CODE 1909500-UK
DETAILS www.pentax.co.uk

OLYMPUS E-510 + ED 14-42mm

★★★★

£532 inc VAT

From www.amazon.co.uk

The E-510 is a beefed-up version of Olympus's E-410 (*What's New, Shopper* 235). The main difference is the inclusion of optical image stabilisation, but it also has extra buttons for depth-of-field preview and auto-focus point, plus labels on its navigation pad for direct access to ISO speed, white balance, metering and auto-focus settings. This speeds up an already quick control system, although the command dial responds lethargically when making large adjustments to settings.

This is the smallest SLR on test, and the only one here to offer a live preview on its LCD screen. This shows white balance, and a momentary 7x digital zoom gives enough detail for accurate focusing. A histogram and the preview image's brightness help with exposure adjustments, but strangely, they reflect only underexposed and not overexposed settings.

The E-510's sensor is smaller than those in the other SLRs here, which results in a smaller viewfinder and relatively high image noise, but still much less than any of the ultra-zoom cameras. There were hints of noise even at ISO 100, and ISO 1600 photos were only just passable. However, image stabilisation means there's less call for high ISO speeds. Detail was a little below par, too, but comparing the RAW output of the SLR cameras, the E-510's photos looked as sharp as the others. This suggests that its JPEG photos sacrifice some detail for the sake of noise reduction.

SUMMARY

- ✓ Image stabilisation built in
- ✓ LCD preview
- ✗ Less detail than other DSLRs

DIGITAL SLR CAMERA 10.0 megapixels (3,648x2,736 pixels), 3.0x optical zoom, CompactFlash and xD slots, 7.2V, 1,500mAh Li-ion battery
PART CODE N2930492
DETAILS www.olympus.co.uk

NIKON D80 18-70 Kit

★★★★★

£660 inc VAT

From www.parkcameras.com

While the D40 and D40x feel like entry-level digital SLRs, the D80 is more substantial, not just in its size and weight but also in its capabilities. It's littered with controls, and ISO speed, white balance, metering modes, bracketing and more besides are adjusted by pressing a dedicated button and turning the dual command dials. A backlit passive LCD screen shows photographic settings, and renders the colour screen largely redundant while shooting. The D40x's configurable automatic ISO mode is also included here (in the same dysfunctional menu layout), and is joined by exposure and white balance bracketing, variable noise reduction strength and a finer manual ISO control that moves in thirds of a stop rather than whole stops. However, as with the other Nikons, the bundled RAW conversion software is disappointing.

The kit lens handles well and has a wider zoom range than most, but its 38cm macro focus is uninspiring. The camera is also available with an 18-135mm lens for under £700, or body-only for £500. Focus is measured at 11 points, but it wasn't as quick as Canon's 9-point system. Image quality tests produced exquisite automatic exposures, stunningly low noise at high sensitivities and a wide dynamic range with no clipped highlights.

The D80 is an excellent all-rounder, but with Canon's EOS 400D matching it for quality and Pentax's K10D for hands-on control, it seems expensive. Still, if you want the best of both worlds, this is the camera to get.

SUMMARY

- ✓ Fantastic image quality
- ✓ Amazing handling
- ✗ Expensive

DIGITAL SLR CAMERA 10.0 megapixels (3,872x2,592 pixels), 3.9x optical zoom, SDHC slot, 7.4V, 1,500mAh Li-ion battery
PART CODE HK-ND80K18-70
DETAILS www.nikon.co.uk

SONY Cyber-shot DSC-H3

★★★★★

£161 inc VAT

From www.dixons.co.uk

The H3 is small and light for an ultra-zoom camera, so it's good for times when a bulkier camera would be impractical. Unlike most compact big-zoom cameras, it has manual exposure controls. However, unlike the others on test, it lacks aperture- and shutter-priority modes, manual focus and manual white balance. Most features are accessed via the menu, which could have been better laid out and can be unresponsive. This basic level of control is disappointing, but it merely directs the camera to a different sort of user. The low-resolution screen and unreliable image stabilisation will disappoint all users, though.

On the plus side, its price is low, its performance is up to scratch with a 2fps continuous mode, and battery life is excellent. Detail was a bit vague in dense textures but colours were excellent and the dynamic range was above average. The flash produced excellent skin tones and was effective at illuminating large subjects, and noise levels at high ISO speeds were the lowest from the non-SLR cameras. ISO 800 gave excellent results, and ISO 1600 was useful for emergencies.

The limited manual options and menu-based controls mean it's no good for creative photographers, but the 10x zoom lens, low noise, fast performance and competitive price make it one of the best casual-use ultra-zoom cameras we have seen.

SUMMARY

- ✓ Compact design
- ✓ Excellent low-light shots
- ✗ No priority modes; basic controls

ULTRA-ZOOM CAMERA 8.0 megapixels (3,264x2,448 pixels), 10.0x optical zoom, 31MB internal memory, Memory Stick Pro Duo slot, 3.6V, 944mAh Li-ion battery
PART CODE DSC-H3.CEH
DETAILS www.sony.co.uk

CANON PowerShot SX100 IS

★★★★★

£200 inc VAT

From www.expansys.com

The SX100 IS looks like a compact camera rather than an ultra-zoom, so its 10x zoom is remarkable. It's the only camera here with an integrated lens cap, and we like the way the pop-up flash is raised manually and can't spring up whenever it wants. There's no shortage of manual controls, with a wheel for quickly adjusting settings, a dedicated ISO button, priority exposure modes and well-executed manual exposure and focus controls.

The use of two AA batteries is a little ungainly, but replacements are cheap and easy to find. The only real downside is a slow flash recharge time of five seconds. Otherwise, performance is typical at 1.6 seconds between shots and a 1.5fps continuous mode.

In bright light, the SX100 produced fantastic photos with sumptuous colours and detail that at times surpassed that of 10-megapixel SLRs. However, image quality deteriorated badly in low light as higher ISO settings led to excessive image noise. Shots at ISO 400 were messy, while higher settings were unusable. The Sony H3's ISO 800 output was on a par with the SX100 at ISO 200.

We're fans of compact, big-zoom cameras and the SX100 is an excellent example, but so is Sony's H3. This camera excels in bright conditions but Sony's is much better indoors. That said, the SX100's manual controls will justify its higher price for some.

SUMMARY

- ✓ Compact design
- ✓ Superb pictures in bright light
- ✗ Noisy in low light

ULTRA-ZOOM CAMERA 8.0 megapixels (3,264x2,448 pixels), 10.0x optical zoom, 16MB SD card memory, SDHC slot, 2x AA alkaline batteries
PART CODE 2091B011AA
DETAILS www.canon.co.uk

CANON PowerShot S5 IS

★★★★

£218 inc VAT
From www.rankhour.com



Canon's S-series has helped invigorate the ultra-zoom market. The S5 IS follows its predecessors' sturdy, curvy design, adding a hotshoe for a flash unit and tucking the SDHC slot in with the four AA batteries, which makes card swapping clumsy. The 2½in, 207,000-pixel LCD screen is hinged for tricky shooting angles and self-portraits. Manual focus, exposure and white balance options work well, but the lack of a RAW mode is disappointing.

The S5 IS is quick to switch on and shoot, and auto-focus is very fast. Buttons for ISO speed, drive mode, flash, macro and manual focus settings leave the navigation pad to control the spot-focus. There are separate buttons for still and video capture. The latter gives excellent results thanks to an optical zoom, smooth auto-exposure and high-quality stereo sound.

Image quality in our tests was often excellent, with superb colour reproduction and smooth, natural-looking detail in bright conditions that wasn't far behind the digital SLRs' output. The lens focuses down to a couple of millimetres for stunning macro shots. However, photos lacked the crispness exhibited by the newer Canon SX100 and Panasonic cameras. High ISO shots suffered the same high noise levels as the SX100, making indoor photography without the flash or a tripod largely impractical.

Overall, there's little to criticise the S5 IS for, but it doesn't have enough unique or outstanding features to compete with the best cameras here.

SUMMARY

- ✓ Hotshoe
- ✓ Superb pictures in bright light
- ✗ Noisy in low light

ULTRA-ZOOM CAMERA 8.0 megapixels (3,264x2,448 pixels), 12.0x optical zoom, 32MB SD card memory, SDHC slot, 4x AA alkaline batteries
PART CODE 2077B007AA
DETAILS www.canon.co.uk

SONY Cyber-shot DSC-H9

★★★★

£234 inc VAT
From www.rankhour.com



The H9 has some exciting specifications, including a 3in hinged screen and a 15x zoom. The latter goes further in both wide-angle and telephoto directions than most others here, although not as far as the Panasonic FZ18. Optical zoom is available during video capture but the tinny sound and erratic auto-exposure let the video mode down. A Night Shot switch activates an infrared lamp for shooting video or stills in total darkness.

The 2fps continuous shooting is the joint fastest of the ultra-zoom cameras. Adjusting key settings is quick, too, thanks to a wheel around the navigation pad that adjusts ISO and shutter speeds, aperture, EV and focus. Auto-focus is generally quick and reliable, but the camera can't give an audible indication of successful focus without also accompanying every button push with an irritating bleep (a problem shared with the H3).

Sadly, the large zoom range results in strong barrel distortion at the wide end of the zoom, giving subjects a bloated, fisheye-lens appearance.

We also saw chromatic aberrations in the corners, where the red, green and blue elements of pictures didn't line up properly. As with the H3, detail was a little soft compared with images from the other ultra-zoom cameras, but not disastrously so, and noise levels at high ISO speeds were low.

Overall, the H9 is a likeable camera, but it's beaten in most respects by the Panasonic FZ18.

SUMMARY

- ✓ Huge zoom
- ✓ Low image noise
- ✗ Chromatic aberrations

ULTRA-ZOOM CAMERA 8.0 megapixels (3,264x2,448 pixels), 15.0x optical zoom, 31MB internal memory, Memory Stick Pro Duo slot, 3.6V, 944mAh Li-ion battery
PART CODE DSCH9S.CEH
DETAILS www.sony.co.uk

PANASONIC Lumix DMC-FZ18

★★★★★

£245 inc VAT
From www.expansys.com



The FZ18 is our favourite of the three 18x zoom cameras we've seen recently, so we decided to retest it here. Its 504mm maximum telephoto zoom is impressive, although it didn't capture noticeably more detail than the Canon S5 IS's 432mm mode. The difference was more significant at the other end, with a 28mm focal length giving a much wider view than other ultra-zoom cameras.

There are no lens rings or command dials, but a mini-joystick and onscreen display provide fast access to key settings without needing to enter the main menu. Performance is up to scratch, with particularly fast flash recycle times, although browsing saved photos is slow.

The FZ18 captured sharp detail right into the corners of photos, with minimal lens distortion. It's a fantastic achievement considering the huge zoom range. Colours were rich, the dynamic range was the best of the ultra-zoom cameras and the fully automatic mode found the perfect settings for every occasion.

In lower light the image stabilisation worked superbly and ISO 400 and 800 shots were relatively smooth, but detail was sacrificed in an attempt to hide noise. However, the RAW mode and highly capable bundled software provided an effective remedy. This is an incredibly flexible camera at a great price.

SUMMARY

- ✓ Huge zoom
- ✓ Smart controls
- ✗ Detail diminishes at high ISO

ULTRA-ZOOM CAMERA 8.0 megapixels (3,264x2,448 pixels), 18.0x optical zoom, 27MB internal memory, SDHC slot, 7.2V, 710mAh Li-ion battery
PART CODE DMC-FZ18-EB
DETAILS www.panasonic.co.uk

PANASONIC Lumix DMC-FZ50

★★★★

£273 inc VAT
From www.ukdigitalcameras.co.uk



Panasonic's FZ50 picked up a Best Buy award in our ultra-zoom lab test a year ago. Since then, nothing has come close to competing with it for ergonomics, and few have challenged its image quality. It has SLR-style lens rings and dual command dials for adjusting zoom, focus, shutter speed and aperture. The 2in screen is small by today's standards but it's just as detailed as the others and is hinged for shooting at tricky angles.

Performance is above average, with 1.4 seconds between shots and a continuous mode just shy of 2fps. The controls greatly speed up operation compared with the other ultra-zoom cameras, particularly for manual focus. Comfortable handling and excellent image stabilisation produced the most blur-free shots in our controlled test.

In bright light, the FZ50's output was largely indistinguishable from that of the 10-megapixel SLRs, but as with all the ultra-zoom cameras, shadows showed a small amount of noise. Indoors, this was impossible to ignore. Even at ISO 100, indoor shots looked grubby, and as we increased the ISO speed, noise levels rose and detail was discarded in a (largely unsuccessful) attempt to suppress it.

The FZ50 is still an excellent camera but its image quality gives away its age. The other cameras in this category offer better quality at lower prices.

SUMMARY

- ✓ Superb, SLR-like ergonomics
- ✓ Great pictures in bright light
- ✗ Poor low-light photography

ULTRA-ZOOM CAMERA 10.0 megapixels (3,648x2,736 pixels), 12.0x optical zoom, 32MB SD card memory, SDHC slot, 7.2V, 710mAh Li-ion battery
PART CODE DMC-FZ50EB-S
DETAILS www.panasonic.co.uk

DIGITAL SLR CAMERAS

ULTRA-ZOOM CAMERAS

MANUFACTURER	BUDGET BUY		BEST BUY		BUDGET BUY		BEST BUY		BUDGET BUY		BEST BUY	
	Model	Model	Model	Model	Model	Model	Model	Model	Model	Model	Model	Model
	NIKON D40 Zoom Kit	NIKON D40x Zoom Kit	CANON EOS 400D 18-55mm Kit	PENTAX K10D + 18-55mm	OLYMPUS E-510 + ED 14-42mm	NIKON D80 18-70 Kit	SONY Cyber-shot DSC-H3	CANON PowerShot SX100 IS	CANON PowerShot S5 IS	SONY Cyber-shot DSC-H9	PANASONIC Lumix DMC-FZ18	PANASONIC Lumix DMC-FZ50
Rating	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Effective number of pixels	6.0 megapixels	10.0 megapixels	10.1 megapixels	10.0 megapixels	10.0 megapixels	10.0 megapixels	8.0 megapixels	8.0 megapixels	8.0 megapixels	8.0 megapixels	8.0 megapixels	10.0 megapixels
CCD diameter	1.12in	1.12in	1.12in	1.12in	0.85in	1.12in	0.4in	0.4in	0.4in	0.4in	0.4in	0.56in
Viewfinder	Optical	Optical	Optical	Optical	Optical	Optical	None	None	Electronic, 115,000 pixels	Electronic	Electronic, 188,000 pixels	Electronic, 235,000 pixels
LCD screen	2¼in (230,000 pixels)	2¼in (230,000 pixels)	2¼in (230,000 pixels)	2¼in (210,000 pixels)	2¼in (230,000 pixels)	2¼in (230,000 pixels)	2¼in (115,000 pixels)	2¼in (172,000 pixels)	2¼in (207,000 pixels)	3.0in (230,000 pixels)	2¼in (230,000 pixels)	2.0in (207,000 pixels)
Optical zoom (35mm-equivalent focal length)	3x (27-82.5mm)	3x (27-82.5mm)	3x (28.8-88mm)	3x (27-82.5mm)	3x (28-84mm)	4x (27-105mm)	10x (38-380mm)	10x (36-360mm)	12x (36-432mm)	15x (31-465mm)	18x (28-504mm)	12x (35-420mm)
Image stabilisation	None	None	None	Optical, sensor-shift	Optical, sensor-shift	None	Optical, lens-based	Optical, sensor-shift	Optical, sensor-shift	Optical, lens-based	Optical, lens-based	Optical, lens-based
Maximum image resolution	3,008x2,000	3,872x2,592	3,888x2,592	3,872x2,592	3,648x2,736	3,872x2,592	3,264x2,448	3,264x2,448	3,264x2,448	3,264x2,448	3,264x2,448	3,648x2,736
Maximum movie quality	N/A	N/A	N/A	N/A	N/A	N/A	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps	640x480 at 30fps	848x480 at 30fps	848x480 at 30fps
File formats (still, movie)	JPEG, RAW	JPEG, RAW	JPEG, RAW	JPEG, RAW	JPEG, RAW	JPEG, RAW	JPEG; MPEG-1	JPEG; AVI (MJPEG)	JPEG; AVI (MJPEG)	JPEG; MPEG-1	JPEG, RAW; QuickTime (MJPEG)	JPEG, RAW; QuickTime (MJPEG)
CAMERA CONTROLS												
Exposure modes	Program, shutter priority, manual	Program, shutter priority, aperture priority, manual	Program, shutter priority, aperture priority, manual	Program, shutter priority, aperture priority, sensitivity priority, manual	Program, shutter priority, aperture priority, manual	Program, shutter priority, aperture priority, manual	Program, manual	Program, shutter priority, aperture priority, manual	Program, shutter priority, aperture priority, manual	Program, shutter priority, aperture priority, manual	Program, shutter priority, aperture priority, manual	Program, shutter priority, aperture priority, manual
Shutter speed	30 to 1/4000 seconds, bulb	30 to 1/4000 seconds, bulb	30 to 1/4000 seconds, bulb	30 to 1/4000 seconds, bulb	60 to 1/4000 seconds, bulb	30 to 1/4000 seconds, bulb	30 to 1/2000 seconds	15 to 1/2000 seconds	15 to 1/2000 seconds	30 to 1/4000 seconds	60 to 1/4000 seconds	60 to 1/2000 seconds
Aperture range	f/3.5 to f/22	f/3.5 to f/22	f/3.5 to f/22	f/3.5 to f/22	f/3.5 to f/22	f/3.5 to f/22	f/3.5 to f/8	f/2.8 to f/8	f/2.7 to f/8	f/2.7 to f/8	f/2.9 to f/8	f/2.8 to f/11
ISO range (at full resolution)	200 to 3200 (equivalent)	100 to 3200 (equivalent)	100 to 1600	100 to 1600	100 to 1600	100 to 3200 (equivalent)	100 to 3200	80 to 1600	80 to 1600	80 to 3200	100 to 1600	100 to 1600
Exposure compensation	None	None	+/-2 EV	+/-3 EV	+/-5 EV	+/-5 EV	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV	+/-2 EV
White balance	Auto, six presets with fine-tuning, manual	Auto, six presets with fine-tuning, manual	Auto, six presets with fine-tuning, manual	Auto, eight presets with fine-tuning, manual	Auto, seven presets with fine-tuning, preset	Auto, six presets with fine-tuning, manual	Auto, seven presets	Auto, five presets, manual	Auto, six presets, manual	Auto, seven presets, manual	Auto, four presets with fine-tuning, manual	Auto, five presets with fine-tuning, manual
Additional image controls	Sharpening, tone, colour mode, saturation, hue, noise reduction	Sharpening, tone, colour mode, saturation, hue, noise reduction	Sharpening, tone, contrast, saturation, colour tone, colour space	Contrast, saturation, sharpness, image tone, colour space, noise reduction	Contrast, saturation, sharpness, colour space, gradation, noise reduction	Sharpening, tone, colour mode, saturation, hue, noise reduction	Contrast, sharpness	None	None	Contrast, sharpness	Aspect ratio, contrast, saturation, sharpness, noise reduction	Aspect ratio, contrast, saturation, sharpness, noise reduction
Scene presets	5 image	5 image	4 image	None	18	5 image	9 image	11 image	13 image	9 image	31 image	18 image
Manual focus	Yes	Yes	Yes	Yes	Yes	Yes	5 preset distances	Yes	Yes	Yes	Yes	Yes
Closest macro focus	38cm	38cm	28cm	25cm	25cm	38cm	2cm	1cm	2mm	1cm	1cm	5cm
Auto-focus modes	Three-point; multi; closest, spot	Three-point; multi; closest, spot	Nine-point, multi; spot	11-point; multi; spot	Three-point; multi; spot	11-point; multi; spot	Multi, centre-weighted, centre, face detect	Centre-weighted, centre, face detect	Multi, centre, spot, face detect	Multi, centre, spot, face detect	Multi, centre-weighted, centre, face detect	Multi, centre-weighted, centre, face detect
Metering modes	Multi, centre-weighted, centre	Multi, centre-weighted, centre	AF point(s), centre-weighted, centre	Multi, centre-weighted, centre	Multi, centre-weighted, centre, highlight, shadow, spot	Multi, centre-weighted, centre	Multi, centre-weighted, centre, face detect	AF point(s), centre-weighted, centre	Multi, centre-weighted, centre	Multi, centre-weighted, centre, face detect	Multi, centre-weighted, centre, face detect	Multi, centre-weighted, centre
Flash modes	Auto, forced, suppressed, slow synchro, slow synchro second curtain, red-eye reduction	Auto, forced, suppressed, slow synchro, slow synchro second curtain, red-eye reduction	Auto, forced, suppressed, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, slow synchro second curtain, red-eye reduction	Auto, forced, suppressed, slow synchro, slow synchro second curtain, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction	Auto, forced, suppressed, slow synchro, red-eye reduction
Drive modes	Single, continuous, self-timer, remote	Single, continuous, self-timer, remote	Single, continuous, self-timer, remote, AE bracket, WB bracket	Single, continuous, self-timer, remote, AE bracket, WB bracket	Single, continuous, self-timer, AE bracket, WB bracket, focus bracket	Single, continuous, self-timer, AE bracket, WB bracket	Single, continuous, self-timer, AE bracket	Single, continuous, self-timer	Single, continuous, self-timer, AE bracket, focus bracket	Single, continuous, self-timer, remote, AE bracket	Single, continuous, self-timer, AE bracket	Single, continuous, self-timer, AE bracket
PHYSICAL												
Memory type (supplied)	SDHC slot (none)	SDHC slot (none)	CompactFlash slot (none)	SDHC slot (none)	CompactFlash and xD slots (none)	SDHC slot (none)	Memory Stick Pro Duo slot (31MB internal)	SDHC slot (16MB SD card)	SDHC slot (32MB SD card)	Memory Stick Pro Duo slot (31MB internal)	SDHC slot (27MB internal)	SDHC slot (32MB SD card)
Power	7.4V, 1,000mAh Li-ion	7.4V, 1,000mAh Li-ion	7.4V, 720mAh Li-ion	7.4V, 1,620mAh Li-ion	7.2V, 1,500mAh Li-ion	7.4V, 1,500mAh Li-ion	3.6V, 944mAh Li-ion	2x AA alkaline	4x AA alkaline	3.6V, 944mAh Li-ion	7.2V, 710mAh Li-ion	7.2V, 710mAh Li-ion
Battery life (tested)	527 shots	527 shots	506 shots	912 shots	818 shots	1,514 shots	515 shots	464 shots	718 shots	326 shots	353 shots	399 shots
Connectivity	USB Hi-Speed, composite	USB Hi-Speed, composite	USB Hi-Speed, composite, remote	USB Hi-Speed, composite, DC in, remote	USB Hi-Speed, composite	USB Hi-Speed, composite, DC in, remote	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Hi-Speed, AV	USB Full-Speed, AV
Body material	Plastic	Plastic	Plastic	Plastic, rubber	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Accessories	USB and composite cables, strap	USB and composite cables, strap	USB and composite cables, strap	USB and composite cables	USB and composite cables, lens hood, strap	USB and composite cables, strap	Combined USB/AV cable, lens hood, strap	USB and AV cables, wrist strap	USB and AV cables, wrist strap	Combined USB/AV cable, lens hood, strap, remote control	USB and AV cables, lens hood, strap	USB and AV cables, lens hood, strap
Weight (with card/battery)	780g	780g	780g	1.0kg	750g	1.1kg	264g	266g	450g	407g	360g	668g
Dimensions (HxWxD)	94x126x64mm	94x126x64mm	94x127x65mm	101x142x70mm	92x136x56mm	103x132x77mm	69x106x48mm	71x109x47mm	80x117x78mm	83x110x86mm	75x118x88mm	86x141x142mm
BUYING INFORMATION												
Price inc VAT	£297	£380	£395	£455	£532	£660	£161	£200	£218	£234	£245	£273
Supplier	www.amazon.co.uk	www.rankhour.com	www.rankhour.com	www.purelygadgets.co.uk	www.amazon.co.uk	www.parkcameras.com	www.dixons.co.uk	www.expansys.com	www.rankhour.com	www.rankhour.com	www.expansys.com	www.ukdigitalcameras.co.uk
Details	www.nikon.co.uk	www.nikon.co.uk	www.canon.co.uk	www.pentax.co.uk	www.olympus.co.uk	www.nikon.co.uk	www.sony.co.uk	www.canon.co.uk	www.canon.co.uk	www.sony.co.uk	www.panasonic.co.uk	www.panasonic.co.uk
Part code	VBA150KU01	VBA170KU01	1237B009AA	1909500-UK	N2930492	HK-ND80K18-70	DSCH3B.CEH	2091B011AA	2077B007AA	DSCH9S.CEH	DMC-FZ18-EB	DMC-FZ50EB-S

Labs verdict Enthusiasts' cameras

This month we've had to look harder than usual for reasons to mark the cameras down. Even so, five have picked up full marks. The Sony DSC-H3's basic photographic options and controls make it less suited to creative photographers, but its large zoom, pocketable design and excellent image quality in low light mean that, on its own terms, it's a huge success. It's perfect for casual users, or as a second camera for SLR owners to take to parties. It wins a Budget Buy award.

Panasonic's FZ18 has everything we look for in an ultra-zoom camera: comprehensive, accessible controls, excellent performance, impeccable image quality and the biggest zoom range currently available in a consumer camera. It's our ultra-zoom Best Buy.

In the SLR category, Pentax's K10D really impressed us with its superb ergonomics, blistering performance and mostly excellent image quality, although a couple of minor complaints regarding the latter meant it narrowly missed out on an award. We have some reservations about the Nikon D40's controls, but £297 is an extraordinary price for what is ultimately a highly competent SLR camera. If you didn't think you could afford a quality SLR, it may persuade you otherwise, and it deserves our Budget Buy award.

However, the Best Buy award must go to Canon's EOS 400D. It gets pretty much everything right: smart, straightforward controls, solid performance and image quality that belies its competitive price. **CS**

DIGITAL SLR CAMERAS



NIKON D40 Zoom Kit
★★★★★



CANON EOS 400D 18-55mm Kit
★★★★★



ULTRA-ZOOM CAMERAS



SONY Cyber-shot DSC-H3
★★★★★



PANASONIC Lumix DMC-FZ18
★★★★★

